US Army Corps of Engineers
Baltimore District

The Corps'pondent

A newsletter by the U.S. Army Corps of Engineers for Spring Valley Project area residents

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The Corps' mission in Spring Valley is to identify, investigate and remove or remediate threats to human health, safety or the environment resulting from past Department of Defense activities in the area.

Project updates, Pit 3 and American University's Public Safety Building

by Daniel Noble
Spring Valley Project Manager

The U.S. Army Corps of Engineers (USACE) has been digging and investigating Pit 3, located in the 4800 block of Glenbrook Road, since Oct. 29, 2007. It was anticipated that the excavation work would take about 14 weeks to complete, but due to the discoveries of munitions-related debris and American University Experiment Station laboratory glassware, the investigation continues.

From April to July of this year, we continued digging to further our investigation. We built an east extension to the Engineering Control Structure or ECS, which is the fabric-covered metal building the contractors work under that is designed to protect the Spring Valley residents from the unlikely event of an explosion or vapor release.

This digging is now complete, and resulted in the recovery of additional discarded military munitions dating back to the World War I-era. Due to operational security, we cannot reveal the exact types and numbers of items that have been located until they have been destroyed.

Now we are focusing our attention on an area immediately to the south of the structure, and have built an additional extension on Glenbrook Road towards Rockwood Parkway. This is an area where 19 metallic anomalies, or objects that exhibit irregular magnetic responses below the ground surface, have been identified. These items need to be investigated since they are so close to the original Pit 3 location.

Work on the southern extension is expected to begin this month and take about two to four weeks to complete. USACE is very interested in the results of this dig because additional anomalies do extend further down the road, and the right safety approach to investigating the anomalies will be determined by what is found in the south extension.

Once the work in the south extension is complete, USACE will build a second extension to the east to investigate buried metal objects that instruments reveal are still in this area. We are committed to safely removing these items and we hope these two additional digs will be the last for Pit 3 where we have to conduct our work under the metal containment structure.

We will continue to share the results of the investigation with our regulatory partners, the U.S. Environmental Protection Agency and the D.C. Department of the Environment. The future work will be planned and carried out in close consultation with these two agencies. It is hoped that Glenbrook Road's high probability work — digging under the ECS — will come to a close in early 2009.

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Shown left is the Engineering Control Structure with the south extension that is used during the excavation activites at Pit 3. (photo by Joyce Conant)

Spring Valley's historical timeline

by Mark L. Baker
U.S. Army Corps of Engineers, Baltimore District

A scientist loads solid oil into experimental Mark II bombs. (historical photo)

■ In the spring 1917, American University offered then-President Woodrow Wilson the use of its campus for the U.S. Army during World War I.

■ In 1917, the Army established Camp Leach, an engineer training camp, and the American University Experiment Station (AUES), a research and development facility for chemical warfare.

■ November 1918, World War I ends.

■ In the summer of 1920, the AUES moves to Edgewood Arsenal, Aberdeen Proving Ground, Md. The military presence at American University ends.

■ In the mid-1930s, a construction firm begins building homes in the area now known as Spring Valley.

■ In January 1993, a utility line installation exposed a cache of buried World War I chemical munitions at 52nd Court, N.W. Washington, D.C.

■ During January and February 1993, a time critical removal action (TCRA) of munitions was conducted; 141 munitions were recovered, 43 were identified as suspect chemical rounds.

■ From 1993 to 1995, the U.S. Army Corps of Engineers conducted an Operation Safe Removal field investigation; no additional burial pits were identified.

■ In 1997, the investigation reopened in partnership with the District of Columbia Department of Health and the U.S. Environmental Protection Agency.

■ From 1999 to 2002, three munitions disposal pits were discovered in the 4800 block of Glenbrook Road; approximately 750 munitions items were removed from these pits.

■ Items containing lewisite, mustard agent, and mustard agent breakdown products have been recovered during intrusive investigations.

■ Soil sampling identified approximately 150 residential properties requiring arsenic cleanup; this work is ongoing.

■ Geophysical investigations of selected residential and non-residential properties to search for remaining burial pits and single munitions items are ongoing.

■ In 2003, a groundwater study was initiated to evaluate the impact of AUES activities on the groundwater. This investigation is ongoing.

■ Active field work scheduled for completion in fiscal 2011. Long term monitoring will continue for the foreseeable future.

Project Updates

(continued from page 1)

Public Safety Building

Since late June 2008, the U.S. Army Corps of Engineers has been investigating potential debris disposal areas around the American University Public Safety Building. Currently the operation is focused on what is believed to be a surface debris disposal area left behind from the American University Experiment Station activities during World War I.

USACE has divided the debris field into 21 trench areas to ensure the stability of the building and is digging in each area to a depth of up to 10 feet. USACE will analyze the debris recovered to see what was left behind.

As of mid-September, six trenches have been fully excavated.

USACE has found a considerable amount of metallic debris and laboratory glassware from the World War I-era, but none of these items are chemical warfare materiel or munitions that could potentially be hazardous.

We do not expect to find this type of material and that allows this investigation to proceed in a low probability mode, which means not having to conduct the work under the protective metal structure, as is the case at the Pit 3 location. This allows us to work more quickly.

There are numerous safety measures in place at this work site, to include site workers highly trained in the areas of unexploded ordnance and chemical warfare materiel, the ability to test for levels of nuisance dust and organic vapors, and daily checks for any trace of the presence of chemical warfare agents.

Similar to the Pit 3 effort, this part of the Spring Valley work is expected to last into 2009; weather conditions and amounts of debris recovered will play a large part in how long the work will take.

We appreciate your patience with all the digging, temporary road signs, and construction-related equipment and personnel in your neighborhood.

For more information, call the community outreach team at 410-962–0157.

Phase 3 groundwater update

by Emily Devillier
Environmental Engineer

The U.S. Army Corps of Engineers is finalizing the work plan for the Phase 3 Groundwater Study. This study will focus on the area between American University's Kreeger Hall and Glenbrook Road.

The plan is to install three shallow wells and four deep wells to gather information about the deep groundwater flow and the perchlorate plume.

A plume is a column of one fluid moving through another; in this case, it is perchlorate moving through the groundwater. Usually, a plume moves away from its source, i.e. where the contaminant originates from. Perchlorate has a variety of sources including some fertilizers, rocket fuel and road flares.

The study is designed to gather additional information about the perchlorate plume and to develop an effective remedial alternative plan that is protective of the groundwater basin.

Installation of the monitoring wells is currently scheduled to begin in late 2008. Contact the Corps' project manager, Todd Beckwith, at Todd.T.Beckwith@usace.army.mil, for additional information.

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Spring Valley Formerly Used Defense Site

Project Lifecycle Schedule

This macro schedule is for planning purposes. It can and will change based on actual progress in the field, improved assessment of project needs, new discoveries and changes in funding (as of Feb. 2008).

Military Munitions Response Program (MMRP) & Hazardous & Toxic Waste Program (HTW)

	FY 08	FY 09	FY 10	FY 11
MMRP	Glenbrook Road – Test Pits, Pit 3 American University Public Safety Building 4800 block Glenbrook Road Anomalies Munitions Disposal Residential Geophysics/Intrusive	4800 block Glenbrook Anomalies AU Public Safety Building AU Main Campus Investigations Dalecarlia Woods Area Geophysical Investigation Residential /AOI (* Area of Interest) Geophysics/Intrusive Munitions Disposal	Dalecarlia Woods Impact Area Intrusive Investigation Residential Geophysics/Intrusive Munitions Disposal	** RI/FS Report, Proposed Plan and Decision Document ** Remedial Investigation/Feasibility Report
HTW	Arsenic Soil Removals Groundwater Investigation Property Reimbursements Phytoremediation AOI, Background Sampling Ecological Risk Assessment Lot 18 Risk Assessment ** RI/FS	Arsenic Soil Removals Property Reimbursements Groundwater Investigation Phytoremediation * AOI Sampling ** RI/FS	Property Reimbursements Groundwater Investigation Phytoremediation ** RI/FS Report * AOI Sampling	** RI/FS Report, Proposed Plan and Decision Document

Restoration Advisory Board (RAB) meetings are held the second Tuesday of every month, with the exception of August and December, at 7 p.m., at St. David's Episcopal Church, 5150 Macomb Street, N.W.
Please note: November RAB will be held on the 12th, due to the Veteran's Day holiday